PERFORMING OPERATIONS; TRANSPORTING

SHAPING

HAND CUTTING TOOLS; CUTTING; SEVERING

CUTTING; DETAILS COMMON TO MACHINES FOR PERFORATING, PUNCHING, CUTTING-OUT, STAMPING-OUT OR SEVERING (soil-working A01B; for growing crops or plants A01D, A01G; for fodder or straw A01F; for bulk butter A01J; for dough A21C; slaughtering A22B; for tobacco, cigars or cigarettes A24; marking-out, perforating or making buttonholes A41H 25/00; manufacturing footwear A43D; brushmaking A46D; surgery A61B; disintegrating, mincing or shredding in general B02C; cutting wire, making pins or nails B21F, B21G; of the kind used for metal B23; cutting by abrasive fluid jets B24C 5/02; hand-held cutting tools B26B; perforating, cutting-out, stamping-out or punching, or severing by means other than cutting B26F; for wood B27; for stone B28D; working of plastics or substances in a plastic state B29; making boxes, cartons, envelopes or bags, of paper or similarly worked materials, e.g. metal foil, B31B; article or web delivery apparatus incorporating cutting or line-perforating devices B65H 35/00; for leather or upholstery B68; C14B; for glass C03B; making matches C06F; for peat C10F; for sugar C13B 45/00; for textile materials D06H; civil engineering, building, mining, see Section E; for light guides G02B 6/25; cutting processed photographic material G03D 15/04)

NOTES

1. This subclass covers:
   • cutting non-metallic sheet material and metal foil in general;
   • cutting other forms of non-metallic material not otherwise provided for;
   • features specific to machines for cutting, perforating, punching, cutting-out, stamping-out and severing by means other than cutting, which relate to a requirement or problem of a nature which is not peculiar to a machine for these purposes, that is, details of or arrangements for operating or controlling such machines, although the realisation of such features may differ according to the kind of machine concerned. This subclass covers such features in general even if the feature in any particular case is to some extent peculiar to, or is claimed only for, a machine designed for perforating, punching, cutting-out, stamping-out, or for severing other than by cutting.

2. If the details or arrangements have no essential features specific to cutting, perforating, punching, cutting-out, stamping-out or severing machines, the more general classes, e.g. F16, take precedence.

3. In this subclass, in groups B26D 5/00 and B26D 7/00, the following term is used with the meaning indicated:
   • "cutting" includes cutting-out, stamping-out, punching, perforating, and severing by means other than cutting.

WARNING

In this subclass non-limiting references (in the sense of paragraph 39 of the Guide to the IPC) may still be displayed in the scheme.
with the work involving a cutting member which does not travel with the work

having a stationary cutting member (B26D 1/547 takes precedence)

having a plurality of cutting members

having a linearly-movable cutting member (B26D 1/46, B26D 1/547 take precedence)

wherein the cutting member reciprocates (cup or like cutting members B26D 1/44)

of the guillotine type

with a plurality of cutting members

having a cutting member moving about an axis (B26D 1/547 takes precedence; cup or like cutting members B26D 1/44)

having a cutting member moving about an axis (B26D 1/20 - B26D 1/24 take precedence)

with horizontal cutting member

with vertical cutting member

with inclined cutting member

rotating about a movable axis (B26D 1/20 - B26D 1/24 take precedence)

mounted on a movable arm or the like

mounted on a movable carriage

coacting with a fixed member

coacting with a movable member, e.g. a roller (B26D 1/24 takes precedence)

coacting with another disc cutter

coacting with a fixed member

with a non-circular cutting member

moving about an axis substantially perpendicular to the line of cut

and rotating continuously in one direction during cutting

with cut having an endless band-knife or the like

having a cutting member the movement of which takes precedence; cup or like cutting members B26D 1/44

with a plurality of cutting members

with a plurality of cutting members

with a plurality of cutting members

with a plurality of cutting members

coacting with a fixed blade or other fixed member

coacting with a rotary member

slidably mounted in a rotary member

moving about another axis, e.g. mounted on the surface of a cone or curved body

having a cup or like cutting member

having a cutting member the movement of which is not covered by any preceding group

having a cutting member, e.g. for sheets, strips or the like

having a cutting member, e.g. for sheets, strips or the like

with inclined cutting member
[For thin material, e.g. for sheets, strips or the like] 1/465

with tensioning means 1/48

{for thin material, e.g. for sheets, strips or the like} 1/485

with a plurality of band-knives or the like 1/50

{for thin material, e.g. for sheets, strips or the like} 1/505

having adjustable spacing between knives 1/52

{for thin material, e.g. for sheets, strips or the like} 1/525

Guides for band-knives or the like 1/54

{for thin material, e.g. for sheets, strips or the like} 1/543

having a wire-like cutting member (endless wire B26D 1/46; severing using a heated wire B26F 3/12) 1/547

{for thin material, e.g. for sheets, strips or the like} 1/5475

with a plurality of wire-like cutting members 1/553

{for thin material, e.g. for sheets, strips or the like} 1/5535

involving a cutting member which travels with the work [otherwise than in the direction of the cut], i.e. flying cutter (flying shears for metal B23D 25/00; flying saws for metal B23D 45/18) 1/56

{for thin material, e.g. for sheets, strips or the like} 1/565

and is mounted on a movable arm or the like {(for metal B23D 25/06)} 1/58

{for thin material, e.g. for sheets, strips or the like} 1/585

and is mounted on a movable carriage 1/60

{for thin material, e.g. for sheets, strips or the like} 1/605

and is rotating about an axis parallel to the line of cut, e.g. mounted on a rotary cylinder 1/62

2001/623

{for selecting different knife sets by shifting the angle of the rotary cylinder} 1/626

{for thin material, e.g. for sheets, strips or the like} 1/6265

Cutting work characterised by the nature of the cut made: Apparatus therefor 3/00

{Cutting tubes longitudinally} 3/001

{specially adapted for cutting rubber} 3/003

{for cutting used tyres} 3/005

{specially adapted for cutting blocs of plastic material} 3/006

{(by sliding)} 3/008

{Bevelling} 3/02

{Grooving involving removal of material from the surface of the work} 3/06

{(On sheet material)} 3/065

{Making a superficial cut in the surface of the work without removal of material, e.g. scoring, incising} 3/08

{(On sheet material)} 3/085

{Making cuts of other than simple rectilinear form (cutting-out B26F)} 3/10

{to obtain pieces of spiral or helical form} 3/11

{Slitting marginal portions of the work, i.e. forming cuts, without removal of material, at an angle, e.g. a right angle, to the edge of the work} 3/12

{Forming notches in marginal portion of work by cutting (by punching B26F 1/12)} 3/14

{Cutting rods or tubes transversely {(cutting tubes longitudinally B26D 3/001)} 3/16

NOTE


{for obtaining more than one product at a time} 3/161

{cutting tubes obliquely} 3/162

{cutting tubes from the inside} 3/163

{characterised by means for supporting the tube from the inside} 3/164

{(by fluid under pressure} 3/165

{(Trimming tube-ends} 3/166

{(Cutting tubes having a non-circular cross-section} 3/167

{(flattened tubes} 3/168

{Hand held tube cutters} 3/169

{to obtain cubes or the like (ice harvesting F25C 5/02)} 3/18

{Grid like cutters} 3/185

{using reciprocating knives} 3/20

{using rotating knives} 3/22

{(with adjustable knives} 3/225

{to obtain segments other than slices, e.g. cutting pies} 3/24

{having means to change the number of equal segments, e.g. for pies} 3/245

{specially adapted for cutting fruit or vegetables, e.g. for onions} 3/26

{Splitting layers from work; Mutually separating layers by cutting ( B26D 3/30 takes precedence; Recovery of plastics or other constituents of waste material containing plastics B29B 17/00) 3/28

{the work being simultaneously deformed by the application of pressure to obtain profiled workpieces} 3/281

{(by peeling-off)} 3/282

{Household devices therefor} 3/283

{(cutting one single slice at each stroke} 2003/285

{(having a detachable blade that is removable attached to the support} 2003/286

{(having a holder for the product to be cut} 2003/287

{(making several incisions and cutting cubes or the like, e.g. so-called “julienne-cutter”} 2003/288

{Halving devices, e.g. for halving buns} 3/30

Arrangements for operating and controlling machines or devices for cutting, cutting-out, stamping-out, punching, perforating, or severing by means other than cutting 5/00

{Performing a pattern matching operation} 2005/002

{Computer numerical control means} 5/005

{Control means comprising cameras, vision or image processing systems} 5/007

{Means for moving the cutting member into its operative position for cutting} 5/02

{(by fluid pressure} 5/04

{by electrical means} 5/06

{Means for actuating the cutting member to effect the cut} 5/08

{Rack-and-pinion means} 5/083

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Details of apparatus for cutting, cutting-out, stamping-out, punching, perforating, or severing by means other than cutting (cutters B26D 1/00; arrangements for guiding hand cutting tools B26B 29/06; punching tools or dies, cutting-out knives or dies B26F)

7/0006 . . . [Means for guiding the cutter (for hand knives B26B 29/06; for band-knives B26D 1/54)]

2007/0012 . . . [Details, accessories or auxiliary or special operations not otherwise provided for]

2007/0018 . . . [Trays, reservoirs for waste, chips or cut products]

2007/0025 . . . [Sterilizing]

2007/0031 . . . [Floating a web during slitting]

2007/0037 . . . [The cutter being a so-called "iris cutter"]

2007/0043 . . . [The cutting machine comprising a linear motor]

2007/005 . . . [Cutters, e.g. guillotines, used in a label maker or printer]

2007/0056 . . . [Rotating a pile of sheets in the plane of the sheets]

2007/0062 . . . [Rounding off the end of self adhesive labels on tapes]

2007/0068 . . . [Trimming and removing web edges]

2007/0075 . . . [So-called "winder slitters"]

2007/0081 . . . [Cutting on three sides, e.g. trilateral trimming]

2007/0087 . . . [For use on a desktop]

2007/0093 . . . [For embossing, forming, creasing, flange forming]

7/01 . . . [Means for holding or positioning work]

2007/011 . . . [By clamping claws, e.g. in high speed slicers for food products]

2007/013 . . . [The work being tubes, rods or logs]

7/015 . . . [For sheet material or piles of sheets (B26D 7/018 and B26D 7/02 take precedence)]
arranged to disable the operating means for the cutting member

Means for mounting or adjusting the cutting member; Means for adjusting the stroke of the cutting member

Means for mounting or adjusting the cutting member

Means for adjusting the position of the cutting member

Means for mounting die cutters

Means for mounting the cutting member

Means for adjusting die cutters

Means for adjusting slotting cutters

Journals, bearings or supports for positioning rollers or cylinders relatively to each other

Means for mounting die cutters

Auxiliary carriages for moving the tool holders

for radial adjustment

for cutters moving in a planetary motion on their support, e.g. so-called "Ferris Wheels"

for cutting pens mounting in a cutting plotter

Flexible mounting means

for the rollers or cylinders being mounted skewed

Means for performing other operations combined with cutting (B26D 9/00 takes precedence)

for counting the number of cuts or measuring cut lengths (B26D 5/24, B26D 5/40 take precedence)

for weighing cut product

for conveying or stacking cut product (means for removing cut-out material or waste B26D 7/18)

the cut products being sheets, e.g. sheets of paper

stacking the cut product individually separated by separator elements

the cut products being slices of bread

for applying a coating, such as butter, to cut product

Cutting apparatus combined with punching or perforating apparatus or with dissimilar cutting apparatus

in combination with different kind of cutters, e.g. two serial slitters in combination with a transversal cutter

Machines or methods used for cutting special materials

for cutting food products, e.g. food slicers

controlling the volume by pressing the food product, e.g. meat to a predetermined shape before cutting

for bread, e.g. bread slicing machines for use in a retail store

Idle cutting

for cutting web rolls